REMARKS

Favorable reconsideration of the present application is respectfully requested.

Claims 5-8 remain withdrawn from consideration. Claims 1-4 and 9-14 remain active, of which Claims 3, 4, 13 and 14 have been allowed.

Claims 4 and 6 have been slightly amended to correct a typographical error which had been introduced into the claims when rewriting the same in the last response.

Claims 1, 2 and 9-12 have been rejected under 35 U.S.C. § 102 as being anticipated by any one of the newly cited references to Waltz et al, Strecker or the Japanese patent publication to Goi, or as being anticipated by JP '431 which was discussed on page 2 of the present specification. However, Applicants respectfully submit that the claims define over any of the above references.

As has already been discussed, Claim 1 recites a friction transmission unit in which a profile defined by a function indicating a gap between the input member and the output member, in contact with each other through an applied load, is a profile other than a circular arc profile, *and that the profile other than a circular arc profile is defined by a shape of contact stress distribution which monotonically decreases in areas near edges of a contact region*. Claim 2 further recites that the contact stress is substantially constant at and around the center of the contact region.

Figures 4 and 5 of the present application illustrate examples of the profiles of power transmitting surfaces. For example, the solid line in Figures 4 and 5 indicates a hyperbolic sign profile which represents an example according to the present invention. Referring to

Figure 6, it can be seen that the contact stress P for the example according to the invention is substantially constant around the center of the contact region and monotonically decreases in areas near edges of the contact region. Claim 1 thus not only recites a friction transmission unit wherein the profile defined by a function indicating a gap in a direction z which is formed between the input member and the output member in contact with each other through an applied load is a profile other than a circular arc profile, *but also recites that a profile which is defined by a shape of contact stress distribution monotonically decreases in areas near edges of a contact region.*

In applying Waltz et al, Strecker and Goi to reject the claims under 35 U.S.C. § 102, the Examiner has alleged that each of these references discloses a "profile indicating a gap which is formed between the input member and the output member is a profile other than a circular arc profile." However, the Examiner has not addressed the further limitation of Claim 1 which requires that *a profile which is defined by a shape of contact stress distribution monotonically decreases in areas near edges of a contact region.* In fact, there is no disclosure in any of these references that a profile which is defined by a shape of contact stress distribution therein monotonically decreases in areas near edges of a contact region.

Nor would the claimed contact stress distribution which monotonically decreases in areas near edges of a contact region be inherent from the disclosures of these references. Waltz et al discloses that the traction roller support is a "cycloid;" while Goi merely describes a "changing curvature" and Strecker describes a "variable" curvature. None of these vague descriptions teaches a profile which would inherently provide a contact stress distribution which monotonically decreases in areas near edges of a contact region. Thus these references

clearly fail to anticipate Claim 1.

As for JP '431, page 2 of the present specification explains that this reference discloses a "Lundberg's profile." The dash line in Figure 6 of the present application shows that such a "Lundberg's profile" provides a contact stress distribution which **increases** in areas near edges of the contact region – *the opposite of what is claimed in Claim 1.* Here again, the Examiner has not addressed the failure of the prior art reference to teach the claimed contact stress distribution, and so the claims also define over JP '431.

Claim 2 further recites that the contact stress is substantially constant at and around the center of the contact region. Again, this is not explicitly taught by, or inherent from, Waltz et al, Strecker and Goi.

Claim 9 further recites that the profile is a profile defined by a point of contact between the input member and the output member where a curvature radius of at least one of the input member and the output member in a direction along a vector indicating friction force between the input member and the output member is minimized. Again, the Examiner has not addressed this limitation, which is not taught by the prior art.

Claim 11 further recites that the point of contact between the input member and the output member is a point between the input member and the output member where a curvature radius of at least one of the input member and the output member in a direction along a vector indicating friction force between the input member and the output member is minimized. Again, the Examiner has not addressed this limitation, which is not taught by the prior art.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

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